

KIWI® Wire Die, specialist in wire die



Kingway™
Technology·Nature·Human

Tianchang Kingway Diamond Dies Factory
Tianchang Kingway Industry & Trading Corp.



*Member of Shanghai Kingway Technology Group Limited

KIWI® Wire Die, specialist in wire die



KIWI® Wire Die, founded in 1999, member of Shanghai Kingway Technology Group Limited, is one of leading manufacturers of wire dies in China, exporting to over 50 countries and areas worldwide.

KIWI® Wire Die Factory, with more than 80 masterful engineers and skilled workers, and over 3000m² production area, possesses advanced high-frequency casing machines, internationally top-ranking laser drilling machines, high-precision Korean Handuk automatic ultrasonic grinding machines, polishing machines, WEDM machine tool and Norway Conoptica (CU10) inspection machines. All the dies are produced and inspected in a rigorous way. The quality is ensured by virtue of rigorous control of each production step.

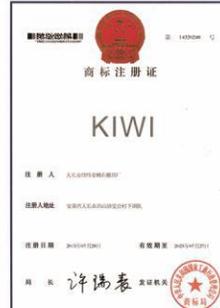
KIWI® Wire Die can manufacture 0.010mm-75.00mm PCD/SSCD/ND/TC round hole wire dies, applicable for wire and tube drawing, wire tinning and wire enameling, wire and cable bunching/stranding/compacting. PCD/TC/SSCD/Tool Steel extrusion tools are suitable for extruding insulation onto wire, cable or fiber-optic cable. PCD/TC shaped dies, such as square, rectangular, triangular, flat, oval, half round, hexagonal, T-shaped, trolley wire and other custom shapes you specify, for all kinds of conductors or components. Additionally, KIWI® ultra-sonic die polishing and shaping machine, cleaning machine etc. are offered for dies workshops to repolish and repair.



Business License
No.: 91341181MA2NCXY5X



The Registration Certificate for Foreign Trade Enterprise
No.: 02865093



Trademark Registration Certificate
No.: 14320248



SGS Test Report
No.: SHIN1809065985ML

KIWI® Polycrystalline Diamond Wire Dies - PCD Dies

PCD wire dies are manufactured with polycrystalline diamonds, a durable synthetic material with a highly polished surface finish that minimizes friction for an exceptional resistance to die wear, cracking and breakage. Hence significantly longer die life, excellent wire roundness and highly predictable die wear with a good wire & tube surface finish.

Hole Sizes: 0.080 - 35.000mm (.00315- 1.378 inches)

Applications: Aluminum wire, copper wire, stainless steel wire, tire cord, welding wire, tungsten wire, molybdenum wire, galvanized steel wire, saw wire, special alloy and high performance alloy wire, precious metal wire, high carbon steel and low carbon steel wire, etc.



KIWI® Synthetic Single Crystal Diamond Wire Dies – SSCD Dies

SSCD wire dies are suitable for fine wire & tube and ultrafine wire applications or as finishing outlet dies when demanding a superior and critical wire surface finish.

Hole Sizes: 0.010 – 1.500mm (.00039- .05906 inches)

Applications: Bonding wire (gold, copper, aluminum), medical wire, copper wire & tube, EDM wire, magnet wire, special alloy and high performance alloy wire, tungsten wire, plated-copper wire, stainless steel wire & tube and wire drawn of precious metals, etc.



KIWI® Natural Diamond Wire Dies – ND Dies

Natural diamond wire dies are of excellent wire & tube surface qualities and long service life due to its extreme hardness and resistance to scratching. ND wire dies also can be used in high-heat processes because of its extreme thermal conductivity. The ND blanks are thermally stable up to 1700°C (3092°F). Nonconductive properties make ND wire die a good choice when electrical conductive materials are an issue.

Hole Sizes: 0.010 – 1.000mm (.00039- .03937 inches)

Applications: Tungsten filament wire, bonding wire (gold, copper, aluminum), medical wire, stainless steel wire & tube, copper wire & tube, EDM wire, special alloy and high performance alloy wire, precious metal wire, various other ferrous and non-ferrous metal wire & tube types



KIWI® Tungsten Carbide Wire Dies – TC Dies

Tungsten carbide wire dies are a wise economical choice for steel wire and other large-size wire & tube drawing applications that make cost savings a priority over die wear resistance and wire surface finish. TC wire dies are also ideal for most ferrous wires, large diameters and applications where corrosive wear is the primary cause of die failure and that require high heat and shock resistance or when short runs are desired because its nibs are thermally stable up to 2870°C (5198 °F).

Hole Sizes: 0.200 – 75.000mm (.00787 - 2.95276 inches)

Applications: Carbon steel wire of all sizes, tire cord and welding wire, stainless steel wire, copper wire, aluminum wire, tungsten wire, various other ferrous and non-ferrous metal wire & tube types.



KIWI® Extrusion Tools - Wire Drawing Extrusion Tips and Dies

Extrude insulation onto your wire, cable or fiber-optic cable with exceptional precision and uniformity using KIWI® Wire Die extrusion tips and dies. Each custom-manufactured tip and die is individually engineered with unique applications expertise, then 100% tested for concentricity verification, to ensure proper wire centering. The end result is an insulated wire with uniform insulation thickness and precise conductor centering that provides the correct electrical characteristics in your finished product.

Hole Sizes:

Single crystal diamond (ND/SSCD): 0.200 - 1.000mm (.00787 - .03937 inches)

Polycrystalline diamond: 0.200 - 3.000mm (.00787 - .11811 inches)

Tungsten carbide: 0.500 - 7.000mm (.01969 - .27559 inches)

Tool steel: 0.350 - 7.000mm (.01378 - .27559 inches)

Applications: Precision-insulated wire and cable, including Category 5, 6 and 7 products where consistent electrical properties are required, such as telephone, telecommunication and electronic cables.



KIWI® Tinning (Tin-plating) Dies

Tinning dies of KIWI® Wire Die adopt titanium alloy casing, to make its ratio lighter than that of tin solution. With SSCD and PCD as blanks, tinning dies enjoy high hardness and precise tolerance, long service life, as well as higher ratio of price and performance.

Tinning dies are used to heat-tin the surface on or shave the tin off the wires such as copper wire and alloy wire. The finished wire enjoys high brightness with an even layer of tin.

Hole Sizes:

Single crystal diamond (ND/SSCD): 0.010 - 0.500mm (.00039 - .01969 inches)

Polycrystalline diamond: 0.100 - 3.000mm (.00394 - .11811 inches)



KIWI® Stranding, Bunching and Compacting Dies

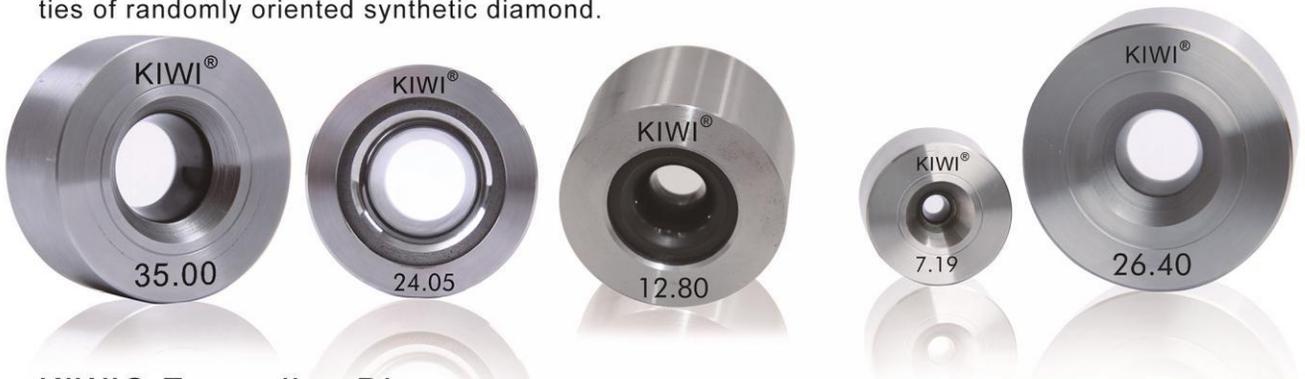
When stranding, bunching and compacting conductor wire, such as copper, aluminum, etc., KIWI® provides the right die materials offering the best combination of economy, wear resistance and wire surface quality to meet your specific needs.

These types of dies can be manufactured from:

Polycrystalline diamond (PCD) blank material: Up to 35mm (or 1.37795 inches), the service life of PCD is longer than that of TC nib material and it also can be recut to larger size when hole is worn.

Tungsten carbide (TC) nib material: Up to 75mm (or 2.95276 inches), TC offers an economical solution for short production runs and when wire surface quality requirements are secondary to cost savings. TC also possesses excellent corrosive wear resistance and provides brighter wire surface than PCD.

Diamond coated (CVD / Nano) blank material: Up to 75mm (or 2.95276 inches), CVD / Nano provides the reasonably thick ultra-smooth layer of diamond on a tungsten carbide die, hence ensures the smoothest wire and cable surface that is possible today. The diamond coated die is the ideal combination of large-size availability of tungsten carbide and the ideal surface properties of randomly oriented synthetic diamond.



KIWI® Enameling Dies

The enameling dies from KIWI® Wire Die are produced according to your figures with polycrystalline diamond (PCD) blank inserts and tungsten carbide (TC) nib inserts which are suitable for copper and aluminum wire enameling. There are two kinds of enameling machines, horizontal type and vertical type. Our enameling dies can assure the die to enjoy perfect profile and anti-leakage, hence uniform coating, smooth and continuous flow of enamel on the wire, as well as high insulation performance.

Hole Sizes:

Polycrystalline diamond: 0.060 – 0.600mm (.00236 - .02362 inches)

Tungsten carbide (TC): 0.160 – 5.200mm (.00630 - .20472 inches)



KIWI® Custom-Made Shaped Wire Dies

Shaped dies are used in both drawing and extrusion machines where material is forced under pressure through the die. For drawing wire with unique, even obscure, shape requirements, turn to the expert custom die capabilities of KIWI® Wire Die. Shaped dies can be made of tungsten carbide (TC) and can also be made of polycrystalline diamond (PCD). Our engineers can custom design a series of dies with such various shapes as square, rectangular, triangular, flat, oval, half round, hexagonal, trolley wire and other custom shapes you specify, which will gradually deform the wire from the original shape to your desired shape and tolerance.

Applications

Aluminum wire, copper wire, aluminum alloy, stainless steel wire and steel wire.



KIWI® Die Workshop Equipment & Accessories for wire dies reconditioning



Dies Blank –
PCD/SSCD/ND



Semi-finished Wire Dies



Die Bearing and Wire
Polishing Machinery



Diamond Powder



Wire Die Inspection
Microscope



Ultrasonic Die Cleaner



Ultra-sonic Die Polishing
and Shaping Machinery

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Add.: 812, Jiafu Plaza, Tianchang, Anhui, China P. C.: 239300

M: 86 13721013737 | T: 86 550 7630889 | F: 86 550 7778313

E: kiwi@kiwiredie.com | W: www.kiwiredie.com

* Member of Shanghai Kingway Technology Group Limited